



ENERGY POLICY UPDATE

August 5, 2014

The Energy Policy Update Electronic Newsletter is published by the Arizona Governor's Office Of Energy Policy and is provided free of charge to the public. It contains verbatim excerpts from international, domestic energy, and environment-related publications that are reviewed by Community Outreach Personnel. For inquiries, call 602-771-1143 or toll free to 800-352-5499. To register to receive this newsletter electronically or to unsubscribe, email [Gloria Castro](#).

UPCOMING WEBINARS

- ✦ ENERGY STAR Webinars
- ✦ U.S. Dept. of Energy Tribal Renewable Energy Webinar Series for 2014

CONTENTS

- ✦ **ARIZONA-RELATED**
- ✦ **ALTERNATIVE ENERGY & EFFICIENCY**
- ✦ **ENERGY/GENERAL**
- ✦ **INDUSTRIES & TECHNOLOGIES**
- ✦ **LEGISLATION & REGULATION**
- ✦ **WESTERN POWER**
- ✦ **STATE INCENTIVES/POLICIES**
- ✦ **GRANTS**
- ✦ **EVENTS**

The Arizona Republic now has limited access. As such, links may or may not work.

ARIZONA-RELATED

[APS Ranked for Efficiency Work](#)

[Arizona Republic, July 28] Arizona Public Service Co. was the highest-ranking utility in the nation in terms of how much additional electricity the company saved through energy-efficiency measures in 2012, according to a new report from Ceres. The non-profit group encourages businesses and investors to act on climate change and other environmental issues. A report released this month in partnership with Clean Edge Inc. ranked 32 major U.S. utilities on renewable-energy and conservation efforts. APS parent company Pinnacle West Capital Corp. ranked No. 1 in the percent of retail sales in 2012 saved through new conservation efforts or new customers participating in the company's existing efficiency programs. It was followed by Semptra Energy, Portland General Electric and Puget Sound Energy. APS was not among the top, nor the bottom, in terms of the percent of electricity delivered from renewable sources or total energy efficiency.

[APS Wants To Put Free Solar Panels on 3,000 Homes](#)

[Arizona Republic, July 28] Arizona Public Service Co. wants to put free solar panels on 3,000 homes to help meet state targets for alternative-energy use and to satisfy customer demand from people who can't afford to buy or lease the power systems. If the plan is approved by regulators, the customers would get a monthly \$30 credit on their electricity bills for 20 years in exchange for allowing APS to put solar panels on their roofs. "This is an effort to reassure our customers that this is not the staid, old, stodgy utility company," said Daniel Froetscher, senior vice president of transmission, distribution and customers. "Instead, we like to think of ourselves as somewhat creative, entrepreneurial and forward thinking." The deal would give participating customers \$7,200 each, but APS officials said the program would benefit all customers by strategically bolstering the grid. The power generated by the panels will flow to the grid, rather than providing power to the homes they are installed on. The deal would be open to renters with consent of the property owner and not require any money down or credit check. APS will evaluate homes of interested customers to ensure roofs are sturdy enough for panels (no clay tiles) and that the home is aligned to capture enough sunlight.

[Electric Cars Now Have the Golden Ticket](#)

Is this karma for self-righteous Prius owners? For years, they've been pretty smug about the fact that they drive a Prius, as if that makes them the only eco-friendly car owners. Now they've lost a key benefit of hybrid driving: a free pass to the HOV lane. The Arizona Department of Transportation recently revised [its list of eligible vehicles](#) for the coveted blue-and-white hybrid

license plates. The technology's changed, ADOT says, and only the most efficient cars should qualify for the perk.

[Environmentalists Unhappy, Could Sue over EPA's Pollution Deal with Arizona Power Plant](#)

[Phoenix Business Journal, July 29] Environmentalists are not happy with a new deal to reduce pollution from a coal-fired power plant on the Navajo Nation Indian reservation near the Grand Canyon. They could sue the Barack Obama administration over the [U.S. Environmental Protection Agency's](#) new emissions agreement for the Navajo Generating Station in the northern reaches of the state. "We are considering challenging it," said [Sandy Bahr](#), state director for the [Sierra Club](#). The plant is operated by the Salt River Project utility. SRP and [Arizona Public Service Co.](#) are among the owners of the coal-fired plant. The Navajo plant is 20 miles from the Grand Canyon, and Bahr said the plant is one of dirtiest in the U.S.

[EPA Cuts Emissions at Navajo Generating Station, Protecting Public Health, Preserving Tribal Jobs and Improving Visibility at the Grand Canyon](#)

[EPA.gov website, July 28] SAN FRANCISCO – Today, the U.S. Environmental Protection Agency finalized its rule to reduce harmful pollution from Navajo Generating Station (NGS), the culmination of five years of efforts between the federal government and tribes, utilities, water users and environmental groups. NGS, one of the biggest sources of nitrogen oxides (NOx) emissions in the country, is a 2,250 megawatt coal-fired power plant located on the Navajo Nation outside Page, Arizona, and less than 20 miles from the Grand Canyon. Each year, more than 4.4 million people travel to the Grand Canyon, spending \$467 million and supporting nearly 7,400 jobs. Yet, the spectacular vistas of the Grand Canyon and 10 other national parks in the region are often clouded by a veil of haze created by air pollution, including NOx. When fully implemented by 2030, the EPA plan will reduce NOx emissions by about 80 percent and the visual impairment from NGS by roughly 73 percent at 11 national parks and wilderness areas.

[Mixed Results For Energy Plan Along Light Rail](#)

[Arizona Republic, Aug. 4] Homes and businesses along light-rail routes in Phoenix should save about \$13 million a year on electricity bills from new energy-efficiency projects paid for by grants under the federal government's 2009 stimulus program. Although city officials declared the Energize Phoenix program a success, an audit released earlier this year showed that energy savings from upgrades, which included better lighting, shade screens, cooling systems and duct repairs, were lower than predicted and that the return on the \$25 million investment was particularly low for some buildings. The return on investment for the two most expensive projects in the program, building renovations for Ballet Arizona and the Arizona Opera, were so low that it dragged down the average for the entire program, according to the audit. Program officials said the investment was worth it to help the arts organizations. Launched in 2010 to create jobs, boost the local economy after the Great Recession and save residents money with rebates for energy-conservation measures to lower power bills, the U.S. Department of Energy-funded program initially struggled to attract enough participants, and contractors overestimated energy savings.

[Renewable Energy Could Make Arizona A 'Solar Capital'](#)

[Cronkite News Service, July 29] WASHINGTON – Arizona could become the "solar capital of the world" if public lands can be made more readily available for renewable energy development, an Arizona official told a House subcommittee Tuesday. Eric Fitzer was one of two Arizonans – along with La Paz County Board of Supervisors Chairman D.L. Wilson – testifying in support of a bill that calls for pilot programs to lease federal land for renewable energy development. Royalties from subsequent energy sales would be split between state, local and federal governments and conservation efforts. Fitzer, senior energy programs manager for the Governor's Office on Energy Policy, told a House Natural Resources subcommittee that Arizona has grown its renewable portfolio in the last few years, but access to federal land would help it make great strides toward developing solar energy. The federal government owns 42 percent of the state's nearly 73 million acres, [Fitzer said](#) – land the state needs to reach its full renewable-energy potential. "For Arizona to become the solar capital of the world, Arizona will look to development of public lands in order to achieve this goal," Fitzer said. [The bill's](#) sponsor, Rep. Paul Gosar, R-Flagstaff, said in opening remarks that public land provides tremendous potential for producing renewable energy and reducing dependence on foreign energy. He said his bill would streamline the permitting process and shorten wait times, encouraging more development.

[Solar Industry Pushes Back Against APS Rooftop Proposal](#)

[Phoenix Business Journal, July 29] The solar industry is raining on a plan by [Arizona Public Service Co.](#) to install solar systems on roofs throughout Arizona. The industry, in which subsectors have been engaged in a war of words with the state's largest utility, were busy raising questions about the APS plan [to spend between \\$57 million and \\$70 million to install about 3,000 solar](#)

systems that it would own. Those issues were raised by national groups as well as local experts. "After attacking rooftop solar companies in Arizona relentlessly for more than a year, this latest tactic by APS has a 'Trojan horse' smell to it," said [Ken Johnson](#), spokesman for the Washington-based [Solar Energy Industries Association](#). "Our member companies welcome fair and equal competition, but this move would stack the deck in favor of a company which can rate-base solar with a guaranteed rate of return. How is that fair? The [Arizona Corporation Commission](#) needs to think this through very carefully." The plan, submitted by APS July 28, must be approved by the ACC as part of the utility's AZ Sun program, which is installing 200 megawatts of solar. Up to this point, APS has installed only utility-scale systems. [Joseph Hui](#), president and CEO of Monarch Solar, said he sees the value proposition as much better for people to own or lease solar than to sign up for the APS program.

ALTERNATIVE ENERGY & EFFICIENCY

[Geothermal Energy Association Names Winners for GEA Honors 2014](#)

Awards to Be Presented at National Geothermal Summit on August 5

[Business Wire, July 28] WASHINGTON – The [Geothermal Energy Association \(GEA\)](#) announced today the winners of their 2014 GEA Honors, which recognizes companies, projects, and individuals who have demonstrated outstanding achievement in the geothermal industry. The winners were selected in categories including Technological Advancement, Economic Development and Environmental Stewardship. Now in its fourth year, GEA also provides special recognition of companies and individuals who have made notable advances and achievements for geothermal energy. GEA will present the Honors at an awards ceremony as part of the upcoming [National Geothermal Summit](#) being held in Reno August 5th and 6th. The following companies and individuals will be awarded 2014 GEA Honors in the following categories: Environmental Stewardship: Awarded for fostering outstanding environmental stewardship through the use of geothermal systems to the Salton Sea Restoration & Renewable Energy Initiative: Imperial Irrigation District in partnership with the County of Imperial. Technological Advancement: There are three companies being awarded for Technological Advancement in 2014. Awardees are: Baker Hughes; Power Engineers; and Ormat Technologies. Economic Development: Awarded for making a substantial contribution to the development of local, regional or national markets through the development of geothermal systems: Dewhurst Group/Grupo Dewhurst. Special Recognition: The Special Recognition Award is presented to the following companies and individuals for their outstanding achievement in the geothermal industry: Mono County Board of Supervisors; AltaRock Energy Inc.; The National Geothermal Data System (NGDS); Bill Price- Enel Green Power North America; Dita Bronicki- Ormat; James C. Hanks, President, Imperial Irrigation District Board of Directors; Greg Mines, Hillary Hanson and Rachel Wood, Idaho National Laboratory. More detailed information on the awardees is available on-line at <http://www.geo-energy.org>.

[How To Fit A Wind Farm Into Your Portfolio](#)

[Associated Press, July 30] NEW YORK — You can now fit a wind or solar farm into your portfolio, even if your portfolio isn't exactly vast. Energy companies are wrapping renewable energy projects and other power-related assets that generate steady cash into new companies they hope attract investors hunting for dividends. In an unfortunate victory for corporate speak, they are called yieldcos. They're the electric power industry's answer to real estate investment trusts, which distribute rental income to investors, and master limited partnerships, which distribute income from oil and gas pipelines to investors. Yieldcos aim to distribute most of the proceeds from generating or delivering electricity to shareholders through a steady stream of dividends. They try to grow the dividend by buying more power projects. Analysts say they are a relatively safe way to invest in renewable energy — much safer, for example, than buying shares in notoriously volatile solar panel makers. Warren Buffet agrees. He's invested \$15 billion in the same type of wind and solar projects that yieldcos own, and he plans to double that amount. But analysts caution there are risks for yieldco investors because their popularity has inflated share prices and the concept is so new.

[Solar Reaching Mainstream for Utilities](#)

[Fierce Energy, July 29] New figures released by the Solar Electric Power Association (SEPA) reflect the central role utilities will continue to play in the growth and change of the U.S. solar industry in emerging trends that have been identified as current and future market drivers, according to the organization. Utilities are in the early phases of developing new and innovative solar options for a full range of customers -- residential, commercial and corporate -- who are gaining interest in renewable energy sources with some utilities exploring community solar, third-party solar leasing, green energy programs and energy storage. Solar is gaining increased levels of public acceptance, and utility solar is now the industry's largest market segment. The report highlights 49 percent growth in the utility-scale solar market in the United States from 2013 to

2014 with accumulated solar capacity currently at 10.7 GW at more than 475,000 locations across the county. The results of the report demonstrate how consumer interest and state mandates are driving utilities to proactively explore new programs.

[Trade Case Backlash: 3 GW of US Utility-scale Solar at Risk](#)

PV project pipeline approaching 50 GW in the United States, but large-scale developments are at risk from proposed trade rulings.

[Renewable Energy World, Aug. 5] California, USA -- More than 3 gigawatts (GW) of the projects currently in the U.S. photovoltaic (PV) project pipeline had been set to use Chinese modules, according to the latest NPD Solarbuzz United States Deal Tracker; however, with the recent anti-subsidy and anti-dumping rulings proposed by the U.S. Department of Commerce, companies may have to find other suppliers or potentially pay higher prices for those modules. Approximately half of the U.S. PV project pipeline is composed of ground-mount systems—many of them large-scale. While traditionally these have been attractive due to economy of scale savings, many could face challenges, in the form of cost increases [stemming from the U.S. trade investigation](#). Large-scale ground-mount PV installations are particularly vulnerable to cost increases and potential disruption, as many have signed power purchase agreements at aggressive rates. Any increase in cost for the projects could mean renegotiation, delay, or even termination.

[US Utilities Offer EV Tariffs to Increase Customer Engagement](#)

[Environmental Leader, July 29] Twenty-five electric utilities across 14 states – including eight of the 15 largest — are now offering electric vehicles rates and tariffs as part of an effort to engage the growing number of customers who drive [electric vehicles](#), according to a [study by Northeast Group](#). In the Midwest, Minnesota has taken the additional step to mandate that electric utilities offer EV tariffs. EV rates generally offer steeper discounts at night and during other off-peak hours. Among the 14 states with EV tariffs, the average equivalent “price per gallon” was \$0.75. The US Department of Energy calculates that without the EV-specific tariffs, the cost of an “eGallon” would be \$1.42. The average cost of gasoline in these states is \$3.70. According to Ben Gardner of Northeast Group, EV owners tend to be more engaged customers, and it is critical that utilities provide them with new rate options for their EVs. EV sales have roughly doubled each year for the past three years, and a number of companies are seeing the various benefits of greener travel.

ENERGY/GENERAL

[Energy Diversity Critical to U.S. Economy](#)

[Fierce Energy, July 28] The uncertainty around the future prices of natural gas, oil, coal, uranium, and others means uncertainty regarding the cost to produce electricity. A diversified portfolio is the most cost-effective tool available to manage the inherent production cost risk involved in transforming primary energy fuels into electricity, and a diverse power generation technology mix is essential to cost-effectively integrate intermittent renewable power resources into the power supply mix -- IHS Energy explains in a new report called “The Value of U.S. Power Supply Diversity.” The current diversified portfolio lowers the cost of generating electricity by more than \$93 billion per year, and halves the potential variability of monthly power bills compared to a less diverse supply, the study says, and produces lower and less volatile power prices compared to a less diverse case with no meaningful contributions from coal and nuclear power, and a smaller contribution from hydroelectric power. In this less diverse scenario, wind and solar power make up one-third of installed capacity and 22.5 percent of generation; hydroelectric power capacity decreases from about 6.6 percent to 5.3 percent and represents 3.8 percent of generation; and natural gas fired power plants account for the remaining 61.7 percent of installed capacity and 73.7 percent of generation. Power supply in the reduced diversity case increases average wholesale power prices by about 75 percent and retail power prices by 25 percent.

[Green Bonds Go Through the Roof!](#)

[SustainableBusiness.com News, July 28] At the end of 2013, seemingly out of nowhere, the market for green bonds took off, all of them over-subscribed. From a meager [\\$2 billion issued over several years](#), we ended the year with \$11 billion in newly issued bonds, spurring many bankers to call it a tipping point. And indeed it is, because this year it's been near-impossible to keep up with them all as the market exploded from niche to mainstream - with almost \$20 billion issued in 2014. It's expected to reach \$40 billion by year-end, and then skyrocket to \$100 billion in 2015! In March, the Solactive Green Bond index launched on the Frankfurt exchange, opening the door to green bond exchange traded funds (ETFs). It currently includes about 33 bonds at \$100 million or more. This is for bonds that are labeled as “green.” If we look at the broader universe of unlabeled bonds that finance climate change solutions - it stands at \$503 billion, up from \$346 billion last year. The majority fund low-carbon transport, notably rail (71%), clean energy (15%) and climate finance (10%). Pioneered by [development banks](#), we've now seen green bonds also issued by

corporations and municipalities around the world. At the same time, there's been a focus on setting verifiable standards for green bonds, to make sure there's no greenwashing. The ultimate goal is to provide the financing necessary to keep global temperature rise below 2 degrees C - \$5 trillion in renewable energy alone by 2020, according to the International Energy Agency (IEA). And that's above "business-as-usual" investments of incentives and loans.

[Waste Management to Sell Electricity-Production Business](#)

[Bloomberg, July 29] Waste Management Inc. (WM), North America's largest trash hauler, agreed to sell its Wheelabrator Technologies Inc. unit for \$1.94 billion to reduce its exposure to electricity prices. The sale to Energy Capital Partners is subject to regulatory approval and is expected to be completed in late 2014, Houston-based Waste Management said today in a statement. Waste Management is shedding the power-generation unit to reduce earnings volatility related to electricity prices and focus on hauling trash, according to the statement. It plans to use proceeds from the sale to repurchase shares and repay debt, which may increase 2015 earnings per share by 2 cents. Wheelabrator owns or operates 21 plants in the U.S. that process more than 7.5 million tons of waste and have a combined generating capacity of 853 megawatts. The business had about \$845 million in sales last year.

INDUSTRIES AND TECHNOLOGIES

[Geothermal Industry Grows, with Help from Oil and Gas Drilling](#)

[New York Times, July 23] SAN FRANCISCO — Geothermal energy — tapping into heat deep underground and using it to produce power — is sometimes described as a forgotten renewable. It languishes in the shadows of better-known sources like wind and the sun, and in 2011 it accounted for less than 1 percent of electric power worldwide, according to last year's World Energy Outlook. Yet the geothermal industry is growing, if slowly, and proponents hope that new technologies — including tie-ins with drilling for oil and natural gas — will bring further gains. Last year, the amount of electric power capacity available from geothermal resources grew about 4 percent to 5 percent globally, according to a [report](#) released in April by the Geothermal Energy Association, which is based in Washington. The United States remains the world's leader in the use of geothermal energy for electric power, followed by the Philippines, Indonesia and Mexico, according to the report. Large projects are planned for Indonesia and East Africa, and some Central and South American countries, such as Chile, are also showing interest. These fast-growing regions are hungry for new electricity sources, and international development banks are helping to finance the projects. (The lower-population New Zealand and Iceland are ranked sixth and seventh in total geothermal use.)

[Ground-Mount Demand Outpacing Building-Mount in U.S. PV Market](#)

[SolarBuzz.com, July 21] Demand in the U.S. market can be viewed in a variety of ways: by state, by customer segment, by size, or by application segment. Each of these can reveal different aspects of how the market operates because each has unique drivers, suppliers, and growth potential. In terms of application segmentation, growth rates have varied widely between building-mount and ground-mount. While growth rates vary by state, for the U.S. as a whole, over the past few years, ground-mount installations have outpaced building-mount by a significant margin in all but a few quarters. A key factor behind the growth of the ground-mount segment is the continued development of large-scale utility projects. Recent data in the [US Deal Tracker](#) highlight a new trend where projects previously designed as building-mount have shifted to ground-mounted carport structures. The continued attractiveness of these projects is expected to result in strong growth in the ground-mount segment through the rest of 2014. However, risks remain in the U.S. market, particularly for the ground-mount segment. One of the main risks is increased installed-system-prices (ISPs) due to tariffs imposed on Chinese modules. Many of the large-scale ground-mount projects have bid PPA contracts at very aggressive rates, and are particularly susceptible to price pressure.

[Open Grid Integration Platform Created for Electric Vehicles](#)

[Energy Manager Today, July 30] With the number of plug-in electronic vehicles (EV) on US roads—225,000 and growing—they are likely to play a significant role in electricity demand side management. The Electric Power Research Institute (EPRI), eight automakers and 15 utilities are developing an open platform that would integrate plug-in EVs with smart grid technologies, enabling utilities to support EV charging regardless of location. The platform will allow manufacturers to offer an interface through which EV drivers can more easily participate in utility EV programs, such as rates for off-peak or nighttime charging. The portal for the system would be a utility's communications system and an electric vehicle's telematics system. The platform enables integration across multiple communication pathways, such as automated metering

infrastructure (AMI), home area networks, building energy management systems, and third-party entities that aggregate energy management services for commercial and industrial power customers.

[Panasonic, Tesla To Build Energy Storage Battery 'Gigafactory'](#)

[Associated Press, July 31] TOKYO — American [electric car](#) maker Tesla Motors Inc. is teaming up with Japanese electronics company [Panasonic](#) Corp. to build a battery manufacturing plant in the U.S. expected to create 6,500 jobs. The companies announced the deal Thursday, but they did not say where in the U.S. the so-called "gigafactory," or large-scale plant, will be built. Financial terms weren't disclosed for the \$5 billion plant. The plant will produce cells, modules and packs for [Tesla's](#) electric vehicles and for the stationary [energy storage](#) market, employing 6,500 people by 2020. Under the agreement, Tesla, based in Palo Alto, California, will prepare, provide and manage the land and buildings, while Osaka-based Panasonic will manufacture and supply the lithium-ion battery cells and invest in equipment. Tesla CEO [Elon Musk](#) has said the factory will help Tesla reduce its battery costs by 30 percent. Tesla needs cheaper batteries in order to produce its mass-market Model 3, an electric car it's developing that would cost around \$30,000. Tesla hopes to have the Model 3 on the road by 2017. The company's only current vehicle, the Model S sedan, starts at \$70,000

[SunPower Planning New 700-MW Factory as Demand Swells](#)

[Renewable Energy World, Aug. 1] NEW YORK -- SunPower Corp., the second-largest U.S. solar manufacturer, is planning a new factory that will expand production capacity by more than 50 percent from current levels, in an effort to increase market share. SunPower's Fab 5 may start production in 2017 and will eventually be able to make at least 700 megawatts of solar panels a year, more than double the size of a plant due to start up next year, Chief Executive Officer Tom Werner said yesterday. SunPower is seeking to increase its capacity as [global demand surges](#). Total industry shipments may increase as much as 29 percent to about 52 gigawatts this year, according to Bloomberg New Energy Finance. SunPower expects to recognize sales of 1.2 gigawatts to 1.3 gigawatts of panels this year, [and its factories are running at full speed](#), Werner said. "Our share has been in single digits for a while and demand for the last 24 months suggests that we can expand share," Werner said in an interview. "Our five-year plan is to at least double market share." Werner spends a "significant" amount of time talking to manufacturing executives about how to coax more output from factories that have reached capacity. "This is really the market telling us they want more of the product."

LEGISLATION AND REGULATION

[Clean-Air Rules Assailed As Too Much, Too Little](#)

[Associated Press, July 29] DENVER — Hundreds of people across the country lined up Tuesday to tell the Environmental Protection Agency that its new rules for power-plant pollution either go too far or not far enough. The agency is holding hearings this week in Atlanta, Denver, Pittsburgh and Washington on President Barack Obama's plan to cut carbon-dioxide emissions by 30 percent by 2030, with 2005 levels as the starting point. The rules are intended to curb global warming. Coal mines, electric utilities, labor unions, environmental groups, renewable-energy companies, government agencies, religious and civil rights organizations and others sent representatives to the hearings. Some endorsed the proposals, while others said they were a timid response to a huge problem or an unwarranted attack on the coal industry and its employees. John Kinkaid, a Moffat County, Colorado, commissioner, told the EPA in Denver that the rules would devastate his area, home to a major power plant.

[U.S. Sets Anti-Dumping Duties on Solar Imports from China, Taiwan](#)

[Reuters, July 25] WASHINGTON — The United States on Friday set new import duties on solar products from China and Taiwan after the Commerce Department found that the solar panels and cells are being sold too cheaply on the U.S. market. Preliminary anti-dumping duties as high as 165.04 percent for Chinese goods would come on top of anti-subsidy levies imposed last month, as the U.S. arm of German solar manufacturer SolarWorld AG seeks to close a loophole allowing Chinese producers to sidestep duties imposed in 2012. China's Trina Solar Ltd faces total import duties of nearly 30 percent and Suntech Power nearly 50 percent as a result of Friday's decision. Taiwanese producers face anti-dumping duties of up to 44.18 percent, with the highest rate applying to Motech Industries Inc, Commerce said. There will be no doubling-up of duties with those from the 2012 case. The new duties, which must still be confirmed, are likely to inflame U.S.-China tensions already exacerbated by recent accusations that Chinese military officers were cyber-spying on U.S. companies involved in trade disputes, including SolarWorld. SolarWorld said the new duties would average 47 percent for most companies, compared with 31 percent in the

2012 case.

[White House Report Presses Economic Case for Carbon Rule](#)

[New York Times, July 29] WASHINGTON — Failing to adequately reduce the carbon pollution that contributes to climate change could cost the United States economy \$150 billion a year, according to an analysis by the White House Council of Economic Advisers released on Tuesday. The report is part of the White House's effort to increase public support for President Obama's climate-change agenda, chiefly [an Environmental Protection Agency proposal targeting coal-fired power plants](#), the nation's largest source of planet-warming pollution. The E.P.A. will hold public hearings, which are expected to be heated, on the proposal this week in Washington, Atlanta, Denver and Pittsburgh. The rule could lead to the shutdown of hundreds of power plants, a decline in domestic coal production, an increase in electricity rates and a fundamental transformation of the nation's power supply. The White House has repeatedly sought to make the case that the long-term cost of not cutting carbon emissions — including longer droughts, worse floods and bigger wildfires that will damage homes, businesses and the nation's infrastructure — will be higher than the short-term expense of carrying out the regulation.

WESTERN POWER

[California and Mexico Sign Pact To Fight Climate Change](#)

[Reuters, July 28] SAN FRANCISCO - California Governor Jerry Brown and Mexican environmental officials signed a pact on Monday aimed at reducing greenhouse gas emissions, an agreement that could eventually expand the market for carbon credits. The six-page memorandum of understanding calls for cooperation in developing carbon pricing systems and calls on the partners to explore ways to align those systems in the future. "California can't do it alone and with this new partnership with Mexico, we can make real progress on reducing dangerous greenhouse gases," said Governor Brown. California operates a carbon cap-and-trade system, which sets a hard limit on the carbon output from large businesses and requires them to either reduce emissions or purchase credits to meet the target. The state is on track to meet its goal of 1990 emissions levels by 2020. California plans to link its nearly two-year-old market with a similar effort in the Canadian province of Quebec, but officials are eager to expand its reach further to keep carbon prices stable and enhance the program's environmental impact. Mexico is the world's 11th largest emitter of greenhouse gases, with electricity generation accounting for the largest share of output, followed by transportation and industry.

[Tesla Breaks Ground for Its Gigafactory in Nevada](#)

[Renewable Energy World, Aug. 1] LOS ANGELES - Tesla Motors Inc. said it's broken ground near Reno for a \$5 billion battery plant, signaling Nevada has vaulted to the lead of five states vying for the so-called gigafactory and its promise of 6,500 jobs. The [electric-car maker said it's still reviewing sites](#) in California, Texas, Arizona and New Mexico, each of which is competing to snare the economic development plum, described as the single biggest new industrial project in the U.S. "On the Nevada side, the ball is in the court of the governor and the state legislature," Chief Executive Officer Elon Musk said yesterday in a conference call. For Nevada, with a 7.7 percent unemployment rate that's the third-highest in the U.S., Tesla represents an opportunity to show that its economy can diversify beyond gambling and housing. The stakes are high for the other states as well. Putting the plant in California would help shake a reputation for high costs and tough regulations that stifle business. For Texas, where Governor Rick Perry is eyeing a comeback presidential bid, the plant could boost prospects on the national stage. Tesla, based in Palo Alto, California, [said it needs the sprawling factory](#) in operation by 2017 to supply lower-cost lithium-ion cells for its cars and packs for home-power storage devices.

[Texas Is Wired for Wind Power, and More Farms Plug In](#)

[New York Times, July 23] Panhandle, TX. — The wind is so relentless that a week can go by before it is calm enough for a crane operator to install the 30-ton blades atop the 260-foot towers at the Panhandle 2 wind farm here. It's worth the wait; a single turbine at the farm can produce 40 percent more energy than an average one. But turning wind into electricity is one thing; moving the energy to a profitable market is another. For years, the wind industry has been hampered by such a severe lack of transmission lines that when the wind is strong, a local power surplus forces some machines to be shut down. Now, Texas is out to change that by conducting a vast experiment that might hold lessons for the rest of the United States. This year, a sprawling network of new high-voltage power lines was completed, tying the panhandle area and West Texas to the millions of customers around Dallas-Fort Worth, Austin and Houston. The project, its supporters say, is essential if states are ever to wean their reliance on fossil fuels and meet new federally mandated rules to reduce carbon emissions.

[The CPUC's Energy Storage Rulemaking: Developing the Bridge to a Renewable Energy Economy](#)

[Energy Manager Today, July 30] Energy storage is widely considered to be the missing bridge between today's electric grid, which is reliant on conventional generation that can be dispatched on demand, and an electric grid reliant on increasing levels intermittent renewable resources such as solar and wind. Unlike water, oil, or natural gas, electric energy on today's electric grid is not easily stored for later use. At present it is transmitted between the generation source and the consumer's load in close to real time. In California, experts predict that as increasing levels of intermittent solar generation resources come online, there will be an excess of generation during peak daytime hours. Energy storage can absorb excess generation during peak hours and release it onto the grid in the evening, curbing the need for additional investments in conventional plants and other utility infrastructure. The development and deployment of commercially viable energy storage technologies to date has been impeded by technical, market and regulatory barriers, not least of which is the lack of motivated buyers. The California Public Utilities Commission (CPUC) is seeking to change that by requiring retail electric utilities to procure a set amount of energy storage capacity. In October 2013, the CPUC established an energy storage procurement target, under which Pacific Gas & Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company must procure a combined total of 1325 megawatts (MW) of energy storage by 2020 with commercial operation commencing no later than 2024. With the 1325 MW target set, the CPUC is now working to figure out (1) what constitutes "energy storage" and what sorts of technologies it should include and (2) how to value the various products that energy storage systems are capable of providing. Observers could be forgiven for thinking that CPUC's approach is backwards. After all, it would seem to make more sense to identify the product before quantifying the amount to be procured. But the CPUC's approach makes more sense when viewed within the context of its primary policy objective, which is to facilitate "market transformation" for energy storage technologies. While this may seem an ambitious goal, this sort of industrial policy for cleantech is not without precedent. Similar policy mandates favoring procurement of renewable generation throughout the US and Europe (most notably in California and Germany) have been credited with creating the demand for solar photovoltaics that led to the historic reductions in solar module costs (a cost reduction of 70-80% from 2007-2012 by some estimates).

[WGA's Jim Ogsbury Testifies Before Natural Resources Subcommittee In Support of Land-Exchange Reform Bill](#)

[Western Governors' Association, July 29] Western Governors strongly support the [Advancing Conservation Education Act of 2014](#) (H.R. 4901) to expedite federal-state land exchanges that benefit both parties. That was the message delivered by Western Governors' Association Executive Director Jim Ogsbury during testimony on Capitol Hill Tuesday (July 29) before the Natural Resources Subcommittee on Public Lands and Environmental Regulation. Ogsbury's testimony noted that "State land managers have a fiduciary duty to manage state trust lands to maximize their revenues for specified constitutional purposes, such as public education. Federal lands are managed for entirely different purposes." Ogsbury continued: "Where state lands are effectively trapped inside federal conservation areas, it only makes sense to effect exchanges so that the federal government can acquire and manage that land consistent with its purposes and the state can acquire land from which economic value can be realized. "The problem is that the ... time-swallowing bureaucratic requirements associated with appraisals, analyses and environmental reviews (and their staggering costs) operate to defeat otherwise sensible trades. It is critical that Congress enact legislation to expedite the process for sensible government-to-government exchanges."

ARIZONA STATE INCENTIVES/POLICIES

ARIZONA COMMERCE AUTHORITY (ACA)

INCENTIVES

Arizona has lowered taxes, streamlined regulations, and established a suite of incentives to support corporate growth and expansion. The Arizona Competitiveness Package, groundbreaking legislation adopted in 2011, makes it easier for existing Arizona companies to prosper and establishes Arizona as one of the most desirable places for expanding companies to do business. Give your company a competitive edge by utilizing Arizona's incentives.

- [Job Training](#)
- [Quality Jobs](#)

- Qualified Facility
- Computer Data Center Program
- Research & Development
- Foreign Trade Zone
- Military Reuse Zone
- Angel Investment
- Renewable Energy Tax Incentive
- Healthy Forest
- Sales Tax Exemption for Machinery and Equipment
- Lease Excise
- Additional Depreciation
- Work Opportunity
- Commercial/Industrial Solar
- SBIR/STTR
- Private Activity Bonds
- QECB's

(ACA) PROGRAMS

DATABASE OF STATE INCENTIVES FOR RENEWABLES & EFFICIENCY (DSIRE)

- Arizona Incentives/Policies
- Federal Incentives/Policies
- Solar Policy News

DSIRE provides summaries of current solar policy developments and an archive of past solar policy developments. Current solar news appears below the news archive, which is searchable by several criteria.

GRANTS

The following solicitations are now available:
(Click on title to view solicitation)

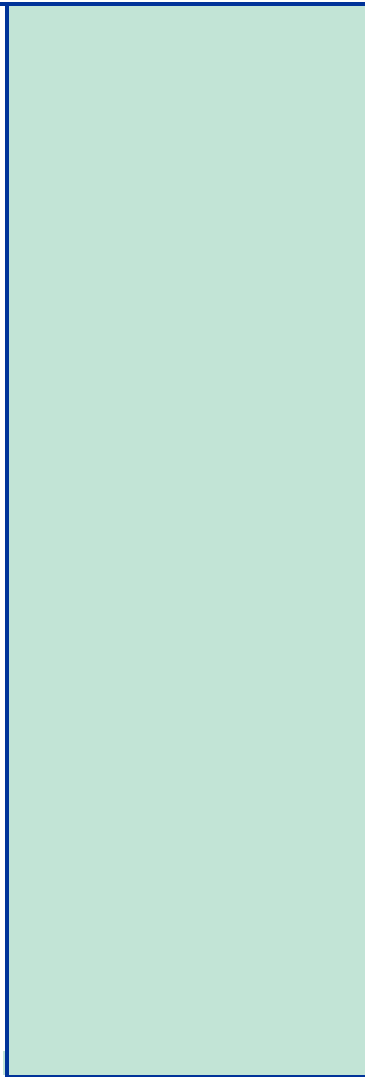














- [Tribal Energy and Mineral Development Grants](#) - Response due Aug. 25, 2014
- [Hydrogen Fuel Cell Technologies Incubator](#) - Response due Sep. 3, 2014
- [Manufacturing Machines and Equipment](#) - Response due Sep. 15, 2014
- [Secure and Trustworthy Cyberspace](#) - Response due Sep. 19, 2014
- [Nanomanufacturing](#) – Current Closing Date for Applications: Sep. 15, 2014
Full Proposal Window: Sep. 1, 2014 – Sep. 15, 2014 Full Proposal Window: Feb. 01, 2015 – Feb. 17, 2015
- [Civil Infrastructure Systems](#) – Sep. 15, 2014 Submission Window Date(s) (due by 5 p.m. proposer's local time): Full Proposal Window: Sep. 01, 2014 – Sep. 15, 2014
Full Proposal Window: Feb. 01, 2015 – Feb. 17, 2015
- **NEW!** [Deployment of Clean Energy & Energy Efficiency on Indian Lands #DE-FOA-0001021](#) – Full Application Submission Deadline: October 2, 2014. A **Webinar** will be held on **August 14**. The intent of this webinar is to provide information for potential applicants to the Energy Departments Funding Opportunity for the Deployment of Clean Energy and Energy Efficiency on Indian Lands (DE-FOA-0001021). - Space is limited - Reserve your Webinar seat now at: <https://www1.gotomeeting.com/register/140937312>
- [Energy for Sustainability](#) – Current Closing Date for Applications: Nov. 5, 2014 Full Proposal Window: Oct. 01, 2014 – Nov. 5, 2014
- [Energy, Power, and Adaptive Systems](#) - Close Date: Nov. 3, 2014

- [National Robotics Initiative](#) - Response due Nov. 14, 2014
- [NSF/DOE Partnership on Advanced Frontiers in Renewable Hydrogen Fuel Production Via Solar Water Splitting Technologies 2014-2016](#) - Close Date: Dec. 11, 2014
- [Energy for Sustainability](#) – Current Closing Date for Applications: Nov. 5, 2014
- [Advanced Fossil Energy Projects](#) - Solicitation Number: DE-SOL-0006303 Expiration Date: Nov. 30, 2016
- [Repowering Assistance Program](#) - Ongoing
- [Rural Business Enterprise Grants](#) - Ongoing
- [Rural Business Opportunity Grants](#) - Ongoing
- [Sustainable Agriculture Research and Education Grants](#) - Ongoing
- [Renewable Energy RFP's - Solicitations for Renewable Energy Generation, Renewable Energy Certificates, and Green Power](#) – Various Deadlines
- [U.S. Dept. of Agriculture - Rural Development Grant Assistance](#)
- [Green Refinance Plus](#) - Ongoing

ENERGY-RELATED EVENTS

2014

- ✚ [Microgrid Development for Public & Private Sectors](#)
August 12-14, 2014 San Diego, CA
- ✚ [Energy 101](#)
August 13 Litchfield Park, AZ
- ✚ [Innovation Arizona Summit](#)
August 14 Scottsdale, AZ
- ✚ [2014 Environmental & Sustainability Summit](#)
August 14, Prescott, AZ
- ✚ [SBIR: Ask the Experts](#)
August 20 Tucson, AZ
- ✚ [SBIR: Ask the Experts](#)
August 21 Phoenix, AZ
- ✚ [2014 ACEEE Summer Study on Energy Efficiency in Buildings](#)
August 17-22, 2014 Pacific Grove, CA
- ✚ [2014 Farm Progress Show](#)
August 26-28, 2014 Boone, IA
- ✚ [Symposium on Thermal & Catalytic Sciences for Biofuels & Biobased Products](#)
September 2-5, 2014 Denver, CO
- ✚ [EPI's 4th Annual Energy Policy Research Conference](#)
September 4-5, 2014 San Francisco, CA
- ✚ [Economic Outlook 2015](#)
September 5, 2014 Phoenix, Arizona
- ✚ [Arizona Technology Summit](#)
Sept. 17 Phoenix, AZ
- ✚ [HTUF 2014 National Meeting - The Forum for Action in High-Efficiency Commercial Vehicles](#)
September 22-24, 2014 Argonne, National Lab - Argonne, IL
- ✚ [Geothermal Energy Expo](#)
September 28-October 1, 2014 Portland, OR

- 
-  [AWEA Offshore Windpower Conference & Exhibition 2014](#)
October 7-8, 2014 Atlantic City, NJ
 -  [Solar Power International](#)
October 20-23, 2014 Las Vegas, NV
 -  [GreenBuild International Conference & Expo](#)
October 22-24, 2014 New Orleans, LA
 -  [World Bio Markets USA](#)
October 27-29, 2014 San Diego, CA
 -  [VERGE SF 2014](#)
October 27-30, 2014 San Francisco, CA
 -  [Governor's Celebration of Innovation](#)
November 13, 2014 Phoenix, AZ
 -  [Renewable Energy Markets Conference](#)
December 2-4, 2014 Sacramento, CA
 -  [Solar Power Generation USA 2015](#)
February 4-5, 2015 San Diego, CA
 -  [ASU Sustainability Series Events](#)
 -  [Green Building Lecture Series](#)
Granite Reef Senior Center Scottsdale, AZ
 -  [ASU Sustainability Series Events](#)
 -  [Green Building Lecture Series](#) Scottsdale, AZ
 -  [ENERGY STAR Webinars](#)
 -  [U.S. Dept. of Energy Tribal Renewable Energy Webinar Series for 2014](#)